

larval form of the Congroid *Nettastoma melanura* *. The resemblance between those two forms will be readily appreciated by reference to Dr. Kaup's figures of the two. Perhaps the affinities of those *Leptocephali* with an expanded caudal are to be sought for elsewhere. As to *Esunculus Costai*, it resembles the young of a Clupeoid; but the high insertion of the pectoral fins, if existent in nature, forbids for the present its positive identification with such. *Stomiasunculus* resembles, in general features, a less advanced larval Clupeoid, about three days old †, in which the ventral fins have not yet appeared. Suspicion, however, may be entertained that it may perhaps be the young of some other type (possibly Stomiadoids), on account of the backward position of the dorsal fin. I have myself, in company with a friend, seen the young of Clupeoids, which would have either been referred to *Esunculus* or considered as the type of a closely allied new genus, on account of the inferior insertion of the pectoral fins; and so transparent were they, that their eyes alone indicated their position in the water. Although entertaining no doubts concerning the larval nature of *Esunculus* and *Stomiasunculus*, I only venture to suggest the possible relations with much reserve. As to *Porobronchus*, Kaup ‡, it is, perhaps, related to *Fierasfer*; but the character of the first elongated dorsal ray requires to be known before a decision can be arrived at.

VIII.—*Description of a new Species of Leptocephalus.*
By Professor PETERS §.

Leptocephalus (Diaphanichthys) brevicaudus, Peters.

Body very much compressed; profile of the ventral margin convex, of the back nearly straight. Snout very acute, convex before the eye, a little shorter than the diameter of the eye; mouth cleft as far as beneath the middle of the eye, armed on each side, both above and below, with eight straight acute teeth, behind which, in the upper jaw, are some smaller acute teeth. The posterior nasal apertures are situated on the muzzle, rather nearer to the eyes than to the apex. The eyes are placed in the middle of the head. Branchial clefts very narrow. *No pectoral, dorsal, or anal fins*, the extremity of the body only being surrounded by the caudal fin, which extends above and below for

* Raf. Caratteri, &c. (1810) p. 66, tav. 16. f. 1.

† See Sundeval, "Om Fiskyngels Utveckling," in Kongl. Vet. Akad. Hand. i. (1855) tab. 4. fig. 6.

‡ Ann. & Mag. Nat. Hist. ser. 3. vi. (1860) p. 272.

§ Translated by W. S. Dallas, F.L.S., from the 'Monatsber. Berl. Akad. der Wiss.' June 1864, p. 399.

about $1\frac{1}{2}$ millim. In the middle of the body, its lower half is fully one-third deeper than the upper half. The colourless body exhibits along the dorsal ridge, as also on each side near the intestine, a series of black points, and beneath the chorda five oblique lines of the same colour, corresponding to the commencement of the ventral portions of the muscles.

Total length, 0·088 metre; head, 0·0035; from the tip of the muzzle to the posterior margin of the eye, 0·002; from the anus to the extremity of the tail (without the fin), 0·0033; depth of the middle of the body, 0·013.

Younger specimens, 0·060 metre in length and 0·007 [in depth] present precisely the same structure and proportions, which would furnish a sufficient proof, if such were wanted, that the *Leptocephali* are not mere larval forms of *Cepola* or other Ribbon-fishes. We have had the opportunity of seeing quite young specimens of *Cepola* and other Ribbon-fishes, and have always been able to recognize their genus, notwithstanding the well-known peculiarities of the young state.

Dr. F. Jagor, to whom we are indebted for this beautiful species, took eight specimens of it, of various sizes, in the open sea between Maybate and Luzon.

IX.—On *Plesiosaurus macropterus*, a new Species from the Lias of Whitby. By HARRY SEELEY, F.G.S., Woodwardian Museum, Cambridge.

ONE of the ornaments of the Woodwardian Museum is a grand Plesiosaur, beautifully displaying the general relations of the bones. It was obtained in 1842 by the energy of the venerable Professor of Anatomy, who, being on the spot when it was found, secured it for the University, when it was purchased by subscription, and confided to the care of the Woodwardian Professor.

The reptile rests nearly flat on the ventral side, in a natural extended posture, the tail only being two or three times bent. But the same hard concretionary limestone which preserves the relations of the bones so well, invests much of the vertebral bodies, so that their relative proportions in form and size are partly obscured.

Hitherto there have been but six species of *Plesiosaurus* described from entire specimens; and with those chiefly our new one will be compared in this brief notice.

The chief characters of the several species, as stated by Professors Owen and Huxley, Mr. Baily and Dr. Carte, are the following:—